

# ELECTROCHEMICAL CELL INCORPORATING

## POLYMER MATRIX MATERIAL

### ABSTRACT

An electrochemical cell using a polymer matrix material includes a polymerization product of one or more monomers selected from the group of water-soluble, ethylenically-unsaturated acids and acid derivatives, and a crosslinking agent. A quantity of water is used for polymerization, such that the polymer material is swelled to a defined volume upon curing. Optionally, a water-soluble or water-swellaible polymer and/or a chemical polymerization initiator.